Instance

Monitor ™

Installation Guide

Version 1.0

**QUEST
SOFTWARE**

Instance Monitor
Installation Guide
Updated – May, 1999
Software Version – 1.0

Contents

Introduction

The guide shows how to install and configure Instance Monitor. If you are new to Instance Monitor you should read Chapter 1 of the *Instance Monitor User's Guide* before proceeding. This will provide you with a basic understanding of Instance Monitor.

This chapter contains the following topics:
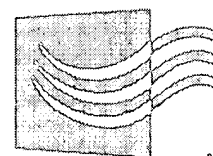
How This Guide is Organized

This guide contains the following information:

Chapter 1
Introduction   Contains information about:

- The conventions that are used in the Instance Monitor documentation.

- Other documents available for Instance Monitor.

- Contact Quest Software, Inc.

Chapter 2
Preparing for Installation   Contains the information you need before you begin to install Instance Monitor.

Chapter 3
Installing Instance Monitor   Contains step-by-step instructions on Installing Instance Monitor.

Chapter 4
Directories and Files Installed   Lists the programs and files that are copied onto your system when you install Instance Monitor.

Database Development and   Describes the software solutions available from
Management Solutions   Quest Software for Oracle DBAs and developers.

Glossary   Contains a description of selected Instance Monitor terms and abbreviations. For a complete glossary of Oracle and Instance Monitor terms see the *Instance Monitor User's Guide*.

Special Notations Used in This Guide

This manual uses the following typographic conventions:

Convention	Description
d:\setup	Text you must type appears in bold.
context, readme.txt	In text, italic letters indicate defined terms, usually the first time they occur in the book. Italic formatting is also used for filenames and directories.
Italics and <u>underline</u>	Text in *italics* is also used to show the title of a chapter or topic in this guide (or in another guide). If the chapter or topic is in another guide, the name of the guide is <u>underlined</u>.
Search, Print	Names of menu functions, buttons, and fields appear with the initial letter capitalized and in bold.
variable	In syntax, italics indicate information you must type.
[*expressionlist*]	In syntax, items inside square brackets are optional.
IF X < 0 THEN➡ GOTO "START" ENDIF	This font is used for program or script source code, user-defined variables and error messages. The line-continuation character (➡) is used when a statement continues onto the next line.
ENTER	Words in capital letters indicate keys and key sequences. A plus sign (+) between key names indicates a combination of keys. For example, ALT+F1 means to hold down the ALT key while you press the F1 key.
	Individual direction keys are referred to by the direction of the arrow on the top of the key (left, right, up, or down). For example, DOWN ARROW.
	Other navigational keys are referred to by their specific names (for example, BACKSPACE or HOME).
Database Administrator (DBA)	Acronyms are explained the first time that they are used. A list of Instance Monitor acronyms and terms can be found in the Glossary on page 29. A complete glossary of Instance Monitor and Oracle terms can be found in the *Instance Monitor User's Guide* and the *Instance Monitor Tuning Guide*.
	This icon is used to indicate some information that may be useful in certain circumstances.
	Used to indicate a warning. The text of the warning indicates the implications of a course of action. Always read warnings before proceeding.
	This icon highlights tips, shortcuts, and general usage advice.
	This icon indicates other references or related sources of information.

Additional Guides and Resources

This guide contains information about installing and configuring Instance Monitor. It is one in a suite of documents provided with Instance Monitor. The following documents are included in the Instance Monitor documentation suite

Guide	Description
Instance Monitor Installation Guide	Contains information about installing Instance Monitor on your system.
Instance Monitor User's Guide	Provides general information about using Instance Monitor.
Instance Monitor Tuning Guide	Contains detailed information on how to use Instance Monitor to tune your Oracle database.

The documents are provided in hardcopy and also in Adobe® Acrobat® portable document format (PDF). The PDF files are included on the Instance Monitor installation CD. The CD also includes a copy of the Adobe® Acrobat® Reader. You must install the Reader before you can view the PDF files.

Using Help

Instance Monitor includes extensive help. You can activate this help by pressing the F1 key on any screen in Instance Monitor. You can also view the help by selecting ... the **Help** menu and choosing **User Manual**.

The help window contains a number of navigation aids to assist you to find information. The following table shows the available navigation aids:

To display this....	Do this...
The table of contents.	Click the **Contents** tab.
The contents of a help topic.	Click the name of the topic. The contents of the topic display in the right pane.
All topics containing a particular word.	Follow these steps: 1. Click the **Find** tab. 2. Type the word you want to search for and press ENTER. The topics that contain the word are shown in the left pane. 3. Click the name of the topic to display the contents of the topic in the right pane.
All topics containing a phrase.	Follow these steps: 1. Click the **Find** tab. 2. Type the first word in the phrase. Select **And** or **Or**. 3. Type the second word in the phrase. 4. Repeat these steps 2 and 3 until you have typed the complete phrase and press ENTER. The topics that contain the phrase are shown in the left pane. 5. Click the name of the topic to display the contents of the topic in the right pane.
Index entries.	Click the **Index** tab. A list of index entries are shown. Type the first letter of the term that you want to display. As you type the list of index entries moves up.

Glossary entries

Click the **Glossary** button at the top of the right pane. A list of terms included in the glossary displays in the left pane. You can scroll through the list of terms. Click on the term to display the definition.

About Quest Software

Quest Software, Inc. is a leading provider of database management, output management, and high-availability software solutions for distributed computing environments. Quest Software's comprehensive and innovative software solutions allow organizations to achieve increased productivity and efficiency with immediate results. With headquarters in Newport Beach, California, Quest Software also has offices across the U.S. and in Germany, France, the U.K., and Australia.

For more information, contact us at:

610 Newport Center Drive, Suite 1400
Newport Beach, CA 92660-6565

Contacting Quest Software

Feel free to contact Quest Software for product information and class schedules.
You can reach our company headquarters in the United States in any of the following ways:

Telephone:	(949) 720–1434
Fax:	(949) 720–0426
E-mail Sales & Marketing:	info@quests.com
Home page:	http://www.quest.com

For information on our international offices, contact us at company headquarters.

If you have questions about using a Quest product, call our technical support staff Monday through Friday from 8:00 A.M. to 5:00 P.M. (PST). Please have the version number handy. If your question is about an error message, write the message down and have it available for the technical support representative.

Whenever you have a question, click **Support Bundle** on the **Help** menu. This creates a file called **support.zip** in your Instance Monitor directory. This file contains a snapshot of your Instance Monitor installation at the time the error occurred. E-mail this file to Quest Software with any request for assistance.

Telephone:	(949) 720–1434
Fax:	(949) 720–0426
E-mail Sales & Marketing:	support@quests.com

We appreciate your comments and suggestions regarding the printed and online documentation provided with this product. Please e-mail your comments and suggestions to documentation@quests.com.
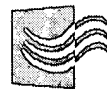
Preparing for Installation

This chapter contains a list of hardware and software requirements you must meet before you install Instance Monitor.

You should also refer to your *Instance Monitor Release Notes* (readme.wri) and *Instance Monitor Installation Notes* (install.txt). These documents are provided on your installation CD. They contain the latest information and helpful hints.

The *Instance Monitor Release Notes* file can be opened in Microsoft® WordPad or Microsoft® Word. The *Instance Monitor Installation Notes* file can be opened in Microsoft® Notepad.

This chapter contains the following topics:

Hardware Requirements

Instance Monitor requires the following hardware:

- **A Pentium-based PC running Windows 95, Windows 98, or Windows NT.**
  Instance Monitor is a 32-bit application and does not run on Windows 3.1. See Software Requirements (on page 11) for more information about the version of Windows you are running.

- **11 megabytes of free disk space.**
  This should exist on a local disk drive rather than a network drive.

- **A monitor capable of supporting a resolution of 800x600.**
  Instance Monitor is designed to run on a desktop area of 800 by 600 pixels. You cannot resize Instance Monitor. You should also set the display to use the 64K color palette (65536 colors).

- **32 megabytes of RAM (minimum).**
  32 megabytes is generally adequate unless there are many other applications running. 64 megabytes of RAM will provide optimal performance.

- **A CD-ROM drive or Internet connection.**
  Instance Monitor can be downloaded from the Internet or installed from compact disc. The CD-ROM drive should be attached to the PC on which Instance Monitor is to be installed. A drive mapped to a network device could be used if a local CD-ROM is not available.

- **A printer.**
  Instance Monitor reports can be printed on a laser or bubble jet printer. You can print graphs in color if your printer provides this capability.

- **A soundcard and speakers.**
  Instance Monitor can use sound to alert you when a threshold is reached. You must have a soundcard and speakers installed on your PC for this feature to work.

- **A mouse.**
  To access all the features of Instance Monitor you should have a mouse installed on your PC.

Software Requirements

Instance Monitor requires the following software:

- **Windows 95, 98, or NT.**
  The following specific requirements exist:

  - Windows NT4, Service Pack 3 must be installed.

  - Windows 98. Latest service pack must be installed.

  - Windows 95C is the only supported Windows 95 operating system.

    Instance Monitor may behave unpredictably under Microsoft Windows 95 and 98 if system resources are low. If you encounter problems, close as many applications as possible and restart Instance Monitor.

- **Your Instance Monitor license key and site message.**
  You must enter this information when prompted during the installation process.

- **SQL*Net 2.3.4 or greater.**
  SQL*Net enables a connection to be established to a database. The database may be local or remote.

  Before you start Instance Monitor you must have the SQL*Net connection string for the database.

- **Oracle 7.3.3 or higher.**
  You must have the Database Administrator (DBA) user ID and password for the database you wish to monitor.

- **SQLab Xpert 3.1c or greater**
  SQLab Xpert provides context-sensitive tuning advice for SQL statements based on the Oracle execution plan and the database structure. You can access SQLab Xpert from the Instance Monitor **Tools** menu.

  You must have the software installed for the link to work. The users who access SQLab Xpert must have DBA privileges on the database they are monitoring.

- **Space Manager 3.3 or greater**
  Space Manager provides a comprehensive solution for space management and reorganization. Space Manager offers preventive maintenance, problem detection and resolution, and capacity planning across any number of databases. You can access Space Manager from the Instance Monitor **Tools** menu.

  You must have the software installed for the link to work. The users who access Space Manager must have DBA privileges on the database they are monitoring.

Installing Instance Monitor

This chapter provides step-by-step instructions for installing Instance Monitor.

This chapter contains the following topics:

Running the Installation CD

This procedure outlines how to install Instance Monitor on your PC. The process should only take a few minutes to complete.

Close all other applications before loading the CD into your PC. You can cancel the installation at any time by pressing the ESCAPE key or by clicking the **Cancel** button.

To install Instance Monitor:

1   Load the Instance Monitor compact disc into your CD-ROM drive.

    Depending on your system's configuration, the installation program may start automatically. If this happens, follow the instructions on the screen to complete the installation.

2   If the installation program does not start, select **Run** from the Windows Start menu.

3   Type **d:\setup.exe** (where **d:** is the CD-ROM identifier) and click **OK**.

4   Follow the instructions displayed on the screen. The setup program prompts you for any information required to complete the installation.

Downloading Upgrades from the Internet

From time to time, Quest Software may make upgrades and patches available from the Internet.

Upgrades will be made available from the Quest Software web site at http://www.quest.com/.

Instructions for downloading are provided on the web site.

Creating Users

Instance Monitor users require special privileges, views, and tables so they can monitor your Oracle databases.

Once the Instance Monitor software is installed on your PC, Instance Monitor starts. The first time you run Instance Monitor, the User Wizard starts. This Wizard is used to create new users or prepare existing users so they can monitor your database.

You must have the user ID and password of the DBA that manages the database to which you are adding users.

Creating New Users

Follow these steps to create a new user in the database:

1   Click **Next** on the first user initialization window.

2   Type the SQL*Net connection string and the user ID and password of the DBA that manages the database. Click **Next**.

3   Select the **Create a new user** button and click **Next**.

4   Complete the following details for the new user and click **Next**.

In this field...	Type...
User name	The user ID for the new user. You can type up to 30 characters.
Password	The password for the user. You can type up to 19 characters,
Confirm password	The password exactly as you typed it in the **Password** field.
Select any table	Select this check box if the user can generate explain plans for SQL statements created by other users.
Alter system	Select this check box if the user can issue trace commands or kill sessions.

5   A list of tablespaces that can be used for Instance Monitor tables and temporary segments appears. Select the tablespaces that are to be used and click **Next**.

6   Instance Monitor creates the user account. A progress meter shows the time remaining. Once the account is created click **Next**.

7   Once the account is configured, the User Wizard gives you the option of logging on to Instance Monitor using the new user account. Choose one of the following options:

- To log on as the new user select the **Log on as...** check box and click **Finish**.

- To log on as a different user (or perform another task) clear the **Log on as...** check box and click **Finish**. You can log onto Instance Monitor using another user ID by selecting **Monitor ▶ Connect**.

Preparing Existing Users

Use this procedure if the user already has an account in the database that is to be monitored.

1   Click **Next** on the first user initialization window.

2   Type the SQL*Net connection string and the user name and password for the DBA account. Click **Next**.

3   Select the **Use an existing user** button and click **Next**. A list of available users appears.

4   Highlight the user and type their password in the User password field. Click **Next**.

5   Instance Monitor creates the user account. A progress meter shows the time remaining. Once the account is created click **Next**.

6   Once the account is configured, the User Wizard gives you the option of logging on to Instance Monitor using the new user account. Choose one of the following options:

- To log on as the new user select the **Log on as...** check box and click **Finish**.

- To log on as a different user (or perform another task) clear the **Log on as...** check box and click **Finish**. You can log onto Instance Monitor using another user ID by selecting **Monitor ▶ Connect**.

Upgrading Existing Users

Use this procedure if:

- You are upgrading Instance Monitor to a new version.

- If a user logs on to Instance Monitor and that user has not previously been configured to work with Instance Monitor.

Follow these steps to upgrade the user:

1   Click **Next** on the first user initialization window.

2   Type the user name and password of the DBA account for the database and click **Next**.

3   Instance Monitor creates the user account. A progress meter shows the time remaining. Once the account is created click **Next**.

4   Once the account is configured, the User Wizard gives you the option of logging on to Instance Monitor using the new user account. Choose one of the following options:

  - To log on as the new user select the **Log on as...** check box and click **Finish**.

  - To log on as a different user (or perform another task) clear the **Log on as...** check box and click **Finish**. You can log onto Instance Monitor using another user ID by selecting **Monitor ▶ Connect**.

Running Calibration

Instance Monitor's calibration function determines the maximum and minimum values for every dataflow by observing the data moving through the database system. The flow is observed for a the period of time that you specify. A calibration should run during a period of normal processing for your organization. The information gathered during calibration helps Instance Monitor draw the dataflows correctly.

Until you successfully run a calibration, Instance Monitor prompts you to run a calibration each time you log on. If you do not want to see this option when you log on, select the **Do not show this message in future** check box.

To run calibration choose **Yes** from the Calibration prompt screen or select **Monitor ▶ Calibration ▶ Start**. The Options window appears with the **Calibration** tab selected.

To start a calibration:

1   Select the **Calibration mode** check box.

2   Choose **Standard Deviation** or **Straight**.

3   Select the period of time that calibration is to run. You can choose any value from 1 hour to 999 hours.

4   Click **OK** to start the calibration. The word Calibrating appears at the bottom of the main Instance Monitor window.

Once calibration is running it can be stopped, changed, or cancelled. For more information on these options see the *Instance Monitor User's Guide*.
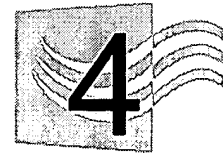
Directories and Files Installed

When you install Instance Monitor, a number of files and programs are copied onto your system. This chapter lists each of these files and describes how they are used by Instance Monitor.

This chapter contains the following topics:

Instance Monitor Directories

Two directories are created when you install Instance Monitor. This section contains the default locations of these directories. You can choose another location during the installation procedure. The directories are:

1   Instance Monitor is installed into the following directory:

`C:\Program Files\Quest Software\Instance Monitor`

Unless otherwise indicated, all files are copied into this directory.

2   A log directory is also created during the install process. This directory has the following path:

`C:\Program Files\Quest Software\Instance Monitor\Logs`

This directory is used to store any log files created by Instance Monitor while it is running.

3   A backup directory may be created if this option is selected during the installation process. The default location for this directory is:

`C:\Program Files\Quest Software\Instance Monitor\Backup`

Files Installed

The following files are installed onto your PC:

• **Could not set timed statistics.rtf** and **Timed statistics message.rtf**

Contain the text for messages that are displayed if you have not turned on timed statistics in your Oracle database.

• **default.mpf**

Contains the default metric, threshold, and severities that are used when you first start Instance Monitor. When you change these settings or calibrate Instance Monitor, a new .mpf file is created with the connect string as the first part of the file name.

• **HDK3HTML.DLL, HDK3CTNT.DLL, and HDK3ANIM.DLL**

These files contain the dynamic link libraries that are required to run context-linked on-line help. The files are installed into one of the following directories:

Operating system	Directory
Windows NT	C:\WINNT\System32

Windows 95 and 98   C:\System

- **Imonitor.cnt**

  The table of contents file for the Instance Monitor on-line help.

- **IMonitor.exe**

  The main program executable. Running this program from the command line or from within Windows will start Instance Monitor.

- **Imonitor.hlp**

  The on-line help for Instance Monitor.

- **INSTALL.LOG**

  Contains a list of the files and directories created during the installation process.

- **LaunchHelp.exe**

  The program that launches the on-line help.

- **monitor.ini**

  The Instance Monitor initialization file.

- **qsauth5.key**

  The authorization key and site message for your site.

- **Readme.wri**

  The Read Me file. This file contains the latest information about installing and running Instance Monitor. You should read this file before you run Instance Monitor for the first time.

- **spdll.dll and Xpert.dll**

  The dynamic link libraries for Explain Plan.

- **sql.dat**

  Contains the SQL code that Instance Monitor utilizes when gathering statistics from your database.
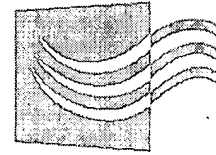
- **Unwise.exe**

  The program that is used to remove Instance Monitor from your PC.

- **Zipdll.dll**

  The dynamic link library WinZip. WinZip is used to create the support bundles that are sent to Quest Software if you have a problem with Instance Monitor.

Database Development and Management Solutions

Quest Software's Database Development and Management solutions optimize the efficiency and performance of Oracle database environments throughout the application lifecycle. Quest Software's intelligent, automated solutions are helping companies develop, deploy and support database-related applications with greater ease, speed and reliability than ever before.

The Quest DBA Productivity Suite

Oracle DBAs have many demands competing for their time. When evaluating solutions to assist them in supporting their database environments, you should consider:

- The amount of time your DBAs have to support the company's databases and applications.

- The amount of experience held by your DBAs and developers.

- The amount of risk that is acceptable for your business.

- Tuning, for example, is a relatively low-risk task, but it requires considerable experience. Making schema changes, on the other hand, can be both risky and time-consuming.

By simplifying complex tasks, this product suite benefits Oracle DBAs at every level. Less experienced DBAs are able to solve more complex problems, thereby freeing your senior DBAs for higher-level management and planning issues. By automating tedious and error prone tasks, these products increase the productivity of the entire DBA team and helps improve the quality and reliability of your applications.

SQLab Tuner™ is a robust, Windows-based SQL analyzer that can locate and tune "offensive" SQL statements buried within homegrown or commercial applications. SQLab Tuner identifies performance issues and enables Oracle database tuning to resolve bottlenecks.

SQLab Xpert™ takes application tuning to the next level by becoming an instant "expert" on your Oracle database. SQLab Xpert provides context-sensitive tuning advice for SQL statements based on the Oracle execution plan and the structure of your database.

Schema Manager™ provides a complete solution for managing schema changes, deployment and auditing throughout the application lifecycle. This includes the migration of changes from development through to testing and production, as well as the tracking, comparison and synchronization of different database schemas. Schema Manager's full deployment support includes the automatic generation of the SQL scripts needed to deploy changes, pre- and post-deployment checks to guarantee success and, in the case of an unforeseen error, automatic rollback scripts to undo changes without the loss of user data.

The *Data Manager Option* (for Schema Manager) helps you extract, subset and propagate data throughout the application lifecycle. Data Manager can help you:

- Deploy reference data from development to production

- Build a test database by copying a subset of the production system

- Extract data for use in a data warehouse or reporting database

- Purge and archive production data

- Move data between heterogeneous databases (e.g. from Oracle to SQL Server).

The data extracts and migrations can be scheduled using the Scheduler Option (for Schema Manager).

SQL Impact™ provides impact analysis, documentation and auditing to manage the dependencies between database objects and application's source code. SQL Impact precisely determines the components that will be affected by structural changes to a database, drilling down to the lines of source code affected. SQL Impact can document the access pattern of an application, and provides automated quality assurance reports on the SQL embedded in the source code. SQL Impact's Year 2000 option supports Year 2000 projects by identifying all date instances and highlighting problematic date usage in both the database and your source code.

Space Manager™ provides DBAs with comprehensive space management and reorganization capabilities. Space Manager tracks the growth and condition of database objects, detects space-related problems, sizes objects for optimal space usage, and reorganizes objects fast - all with minimal impact on application availability. Space Manager charts database growth and provides capacity planning information.

SQLab Monitor™ provides complete statistics of all the processes running on your databases, including user and application access, I/O activity and database operational overhead. It supplies a snapshot of all operations occurring in one or more Oracle servers in a single, easy-to-use interface. This information can then be used to quickly identify database performance exception conditions and, in turn, take appropriate corrective action.

I/Watch™ is a complete enterprise monitoring solution for databases, applications, and operating systems. I/Watch eases the management of Oracle databases by providing proactive information that helps DBAs identify and correct defined performance exception conditions. I/Watch's multi-tier architecture uses many low-level DBMS and operating system monitoring techniques to keep a continuous watch on specified exception conditions or performance characteristics. Data gathered by I/Watch may be used to trigger alarms, perform statistical analysis, or graph in real time. You can use I/Watch to detect and investigate problems in your database environment and understand the effect that environmental factors have on database performance.

Instance Monitor™ is a real time monitoring and diagnostic tool for Oracle databases. Instance Monitor shows a visual representation of process flows within an Oracle instance, allowing you to observe actual database activity in real time. It quickly identifies bottlenecks using flows, graphs and visual icons. Instance Monitor also displays the details of problem areas, including Most Active Sessions, Inefficient SQL, Locks/Latches/Wait Events, and Disk I/O, helping you resolve performance problems quickly. Instance Monitor snaps into Quest Software's I/Watch for 24x7, unattended monitoring of systems, databases, and applications.

SharePlex for Oracle™ provides high speed, log-based replication between Oracle instances on a variety of platforms. Designed for high-intensity OLTP environments, SharePlex for Oracle differs from other replication products by maintaining fully accessible target instances on a continuous, near-real-time basis—with very little impact on system resources. DBAs can use the target instances in many ways, including offloading report and query processing, data distribution and warehousing, Y2K testing and high-availability. In addition, because the target instances remain available even when the primary system is down (planned or unplanned), SharePlex for Oracle serves as a key component of a comprehensive disaster-recovery plan.

SharePlex Overdrive™ extends the SharePlex for Oracle solution by allowing DBAs to coordinate the results of a physical synchronization with the transaction-based replication being performed by SharePlex. Designed to work in conjunction with EMC's SRDF and TimeFinder products, SharePlex Overdrive ensures highly reliable, continuously updated and accessible copies of all Oracle instances in the database environment.

The SQL Navigator™ Developer Productivity Suite

The SQL Navigator™ family is a complete development environment for Oracle PL/SQL and SQL server-side development and management. It provides an integrated environment for the development and testing of stored procedures, schemas, SQL scripts, and more - all from an easy-to-use graphical user interface. This suite of solutions was conceived, designed and developed by Oracle developers and DBAs with a hands-on knowledge of the problems typically encountered when developing applications under Oracle. SQL Navigator's user-friendly design is helping Oracle development and administration teams achieve unprecedented productivity gains worldwide.

SQL Navigator™ is the market leader in server-side development for PL/SQL applications on Oracle databases. It provides a feature-rich, integrated environment where developers can edit, compile, execute and test their PL/SQL code from an easy-to-use, Windows console. The SQL Navigator's Graphical User Interface allows you to copy objects from schema to schema quickly and easily without writing SQL scripts. Developers will find several SQL editors for developing ad hoc SQL scripts, triggers, and stored PL/SQL programs. With advanced features such as color syntax highlighting and drag-and-drop coding, SQL Navigator dramatically increases the productivity of Oracle developers and database administrators and improves the quality of applications.

SQL Navigator's Debugger™ option adds a robust, step-through debugger to SQL Navigator. Code and debug line-by-line and statement-by-statement without changing your normal application process. This saves valuable testing time and improves the overall quality of your applications.

SQL Navigator's Version Control™ option enables team programming with appropriate security and version control measures. This option integrates seamlessly with third-party version control systems, InterSolv® PVCS® and Microsoft® SourceSafe®.

SQL Navigator's Tuner™ option allows developers to effectively tune SQL statements while they are creating and modifying PL/SQL code in SQL Navigator. This option provides automated tuning capabilities and comprehensive execution and comparison statistics. SQL Navigator's Tuner option allows developers to tune SQL statements across multiple databases, without the requiring the assistance of a DBA.

SQL Navigator's Xpert™ option provides an expert "Advise" function for in-depth tuning advice that is context-sensitive to individual SQL statements.

SQL Navigator's Web Development™ option supports the building and debugging of Oracle Web server applications. This option allows you to develop PL/SQL code, view and save as HTML source, run Web server applications and view the Web output from SQL Navigator.

SQL Navigator's PL/Vision™ option provides a complete PL/SQL Code Library of 900+ functions which targets developer's most time consuming tasks. Architected by Steven Feuerstein.

SQL Impact™ provides impact analysis, documentation and auditing to manage the dependencies between database objects and an application's source code. SQL Impact precisely determines which application components will be affected by structural changes to the database, drilling down to the lines of source code affected. SQL Impact can document the access pattern of an application and provides automated quality assurance reports on the SQL embedded in the source. SQL Impact's Year 2000 option supports Year 2000 projects by identifying all date instances and highlighting any problematic date usage in both the database and source code.

QUEST SOFTWARE

610 Newport Center Drive, Suite 1400	U.S. and Canada: 949.720.1434
Newport Beach, CA 92660	UK: +44 175 357 8810
http://www.quest.com	Germany: +49 211 89 03 268
	Australia: +61 3 9885 5829
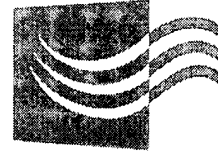
Glossary

This section contains some of the terms that are used in Instance Monitor. For a full glossary of Instance Monitor and Oracle terms, see the *Instance Monitor User's Guide*.

Activity button

Click the **Activity** button to display the activity drilldowns. These include:

- **Activity Summary** tab
- **Wait activity** tab
- **Lock activity** tab
- **Latch activity** tab
- **Server activity** tab.

Alarm Log button

Click the **Alarm Log** button to display the Alarm log. The Alarm log contains information about the alarms that have been raised in this Instance Monitor session.

browse button

Click the **Browse** button to search for a file or to specify the drive and directory where a file is to be saved.

When you click this button, the **Open** window appears. Use the standard Windows commands to locate the file or directory.

When you have found the file or directory, click **Open**. The file and pathname are shown in the field where you clicked the **Browse** button.

calibration

Determines the maximum and minimum values for every dataflow by observing the data moving through the database system. This information helps Instance Monitor draw the dataflows correctly. You can manually override these calibrated thresholds at any time, and for any given dataflow.
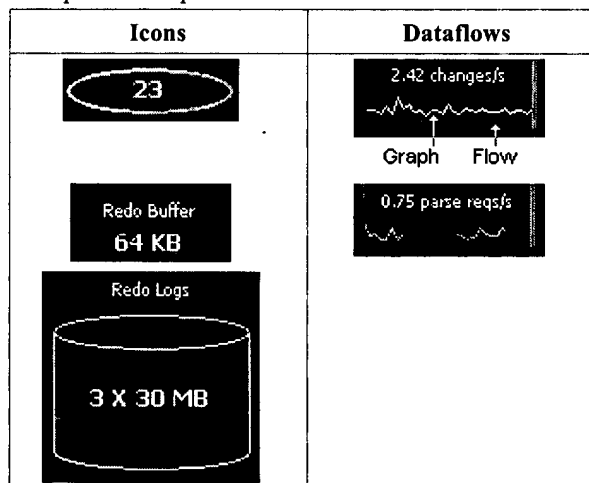
chart	A graphical representation of a statistic over a period of time. One or more statistics may be shown on the same graph.
	To highlight an area of the chart, position your cursor at the top left corner of the area you want to highlight. Click and hold the left mouse button and drag it across the area you want to highlight. An outline is shown around the area you selected. When you release the mouse button, the graph is redrawn showing just the area you highlighted. You can continue to zoom into the area you have highlighted.
	To display the graph at normal size, click and hold the mouse button in the graph. Move the cursor up and to the left. When you release the mouse button the graph is redrawn at normal size.
component	The icons and dataflows shown on the main **Instance Monitor** window. The following diagrams show examples of components.

Icons	Dataflows
23	2.42 changes/s Graph Flow
Redo Buffer 64 KB	0.75 parse reqs/s
Redo Logs 3 X 30 MB	

See also dataflow, icon, and label.

database connection	A link to a database and its data. This link is established when you log on to the database.
database files	Files that contain the data that makes up an Oracle database.
database object	Anything that is stored in a database, including tables, views, indexes, snapshots, triggers, and stored program units.

database writer (DBWR)	The process that is responsible for writing changed blocks from the buffer cache to the database files.
dataflow	A line graph on the main **Instance Monitor** window. Dataflows depict the flow of information between different components of the database management system. The color of a dataflow can change in response to the data that is displayed.
	You can display a dataflow as a pulse or as a flow and a graph.
	For more information see flow, graph, and pulse.
DBA	Database Administrator. The person who maintains the databases in your organization.
flow	The **flow** shows you the current level of activity. As the rate of data transfer increases, so too does the speed of the flow. If the statistic represented by the flow moves into another threshold, the flow may change color. The combination of movement and color makes it easy to spot congested areas.
	The **graph** sits on top of the flow and shows you how the load has varied over time.
	The following diagram shows an example of a flow and graph.

Graph   Flow

graph	A white line that sits on top of a pulse. The graph represents how the load on the database has varied over time.
	See flow for more information.
I/O	Input or output to a peripheral device. In an Oracle context, I/O refers to input or output disk devices.
icon	The icons in Instance Monitor fall into the following categories:

Process icons are oval in shape and contain a single value that represents the state or existence of a database process.

Redo Buffer
64 KB

Memory icons are rectangular and show the utilization of database-specific areas in memory.

Redo Logs

3 X 30 MB
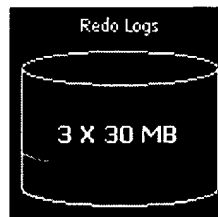
Disk icons are cylindrical and fill up as a file increases in size.

—100

—0

Meters show a measurement. The highest and lowest possible values of the measurement are shown.

IO button

IO

Click the **IO** button to display the I/O drilldowns. These include:

- **I/O Summary** tab
- **I/O by datafile** tab
- **Logical I/O** tab.

label

Labels are shown above most icons and dataflows.

Label

2.42 changes/s

A **label** may have different metrics and thresholds to the component it is over. You can also tailor the metrics and thresholds of the labels.

main menu bar

The menu bar is shown at the top of the **Instance Monitor** window. It contains the following options. They are:
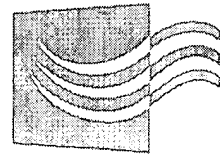
- Monitor
- Navigator
- Tools
- Help.

metric	A unit of measurement that can be applied to a database. Metrics can help you gauge the performance of a database system.
multi-threaded servers	See server processes.
page	A connection to a database.
panel	A group of related components (normally icons) on the main **Instance Monitor** window. The name of the panel is normally shown at the top of the panel.
pause button	Click the **Pause** button to stop Instance Monitor collecting information.

To restart the data collection, click the button again.

positioning buttons

Instance Monitor provides two buttons you can use to change the order of thresholds and severities. The buttons are:

Click this button to move the item up in the list. For example, to move it from position 3 to position 1.

The other items in the list are renumbered.

Click this button to move the item down in the list. For example, to move it from position 2 to position 6.

The other items in the list are renumbered.

pulse

The **pulse** moves in the direction of the dataflow. As the rate of data transfer increases, so too does the speed of the pulse.

The pulse can change color if the statistic represented by the pulse moves into another threshold.

The combination of movement and color makes it possible to identify congested areas quickly.

The following diagram shows an example of a pulse with a label:

0.75 parse reqs/s

severity	Describes the level of importance of a threshold. A severity is user-defined and determines how Instance Monitor behaves when the values for a metric fall within a range of values. For example, unusually large values might force a metric into a threshold with a high severity. This in turn could change the color of a component, play a sound, or execute an operating-system command.
SQL button	Click the **SQL** button to display the SQL drilldowns.
threshold	A range of values that might be returned by a metric. If the metric falls within this range, Instance Monitor checks the threshold's severity to determine how to behave. For example, the component representing the metric might change color.
Tooltip	A message that appears whenever the mouse cursor moves over certain areas of the screen.
Top Sessions button	Click the **Top Sessions** button to display the Top Sessions drilldowns. These include:

- **Session Details** tab
- **Session Waits** tab
- **Session SQL** tab
- **Session Locks** tab
- **Track Session** tab
- **Session Statistics** tab.

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